WHAT IS CLAIMED IS:

23. A biopsy instrument, comprising:

an outer hollow cannula having a distal end portion which is capable of piercing tissue; and

an inner member having a distal portion which is biased to expand radially at its distal end, and which is capable of cutting and severing tissue:

wherein at least one of said outer hollow cannula and said inner member is slidable relative to the other of the outer hollow cannula and the inner member so that first the inner member may be extended distally with respect to the outer cannula, such that said inner member distal portion expands radially to capture a tissue sample, and then the outer cannula may be extended distally with respect to the inner member sufficiently so that the distal end portion of the inner member is forced by the outer cannula to close about and sever the tissue sample, thereby containing the sample within the inner member.

24. A biopsy instrument as recited in Claim 23, wherein the distal portion of the inner member comprises an alligator tip having a pair of hinged jaws which are biased to expand radially.

25. A biopsy instrument as recited in Claim 23, wherein the distal portion of the inner member comprises a plurality of hooked extractors.

27. A biopsy instrument as recited in Claim 23, and outer hollow cannula being biased to move distally upon actuation by a user.

28. A biopsy instrument as recited in Claim 27, and further comprising a spring for biasing said outer hollow cannula.

6 29. A biopsy instrument as recited in Claim 25, wherein said plurality of hooked extractors are biased to move distally upon actuation by a user.

7 30. A biopsy instrument as recited in Claim 29, and further comprising a spring for biasing said hooked extractors.

8 31. A biopsy instrument as recited in Claim 23, wherein both said outer hollow cannula and said inner member are biased to move distally when actuated by a user.

9 32. A biopsy instrument as recited in Claim 31, and further comprising a first spring for biasing said outer hollow cannula and a second spring for biasing said inner member.

10 33. A method of extracting a tissue sample from a desired site, using an instrument which comprises an outer hollow cannula having a distal end, and an inner grabber member having a distal extractor portion comprising a plurality of hooked extractors, said method comprising:

inserting said instrument into a patient so that the distal end of the outer hollow cannula is at said desired site;

moving a position of said plurality of hooked extractors distally, relative to said outer hollow cannula, so that said hooked extractors expand in a radial direction and engage a tissue sample to be extracted;

moving a position of said outer hollow cannula distally, relative to said plurality of hooked extractors, so that said hooked extractors retract in a radial direction and thereby surround said tissue sample severing said tissue sample from surrounding tissue; and

withdrawing said instrument, with said tissue sample from said patient.